Talking Points
NASA Administrator
Daniel S. Goldin

"U.S./Israeli Partnership in Space – More than Frozen Kugel"

American Israel Public Affairs Committee (AIPAC)
1999 National Summit
Gala Dinner at the National Air and Space Museum
October 25, 1999

I. INTRODUCTION

Thank you for the kind welcome. It is an honor to join you in this magnificent museum. I would like to thank the leadership of AIPAC, President Lionel Kaplan and Executive Director Howard Kohr, and its active membership for their work to make tonight possible, but more importantly for the work all of you do on behalf of the miracle we call Israel.

Look around this museum and you see exhibits honoring some of the greatest accomplishments in the history of humankind. Names like the Wright Brothers, Amelia Earhardt, and Neil Armstrong are attached to those feats.

But you and I know that success is rarely the product of an individual acting alone.

I was in Israel to help celebrate 50 years of Israel and the Israeli Air Force. We paid tribute to some great heroes -- Herzl, Weizmann, Ben Gurion, Meir, Rabin.

But most of all, we agreed that Israel's history -- sometimes trying and often tumultuous -- has always been triumphant. AIPAC has helped make it so.

Finally, I'd also like to thank and welcome my counterpart, Israeli Minister of Science Matan Vilnai, and, of course, Israeli astronaut, Ilan Ramon. He and another Israeli astronaut currently training in Houston, Itzhak Mayo, will be some of Israel's first heroes in the new millennium.

It was right after college that I first went to work at NASA . . . In Cleveland, Ohio.

It was a big move. About 70 family members and friends showed up at the airport.

They wanted to know, especially my mother: "Why in the world is a nice Jewish boy from New York going all the way out West . . . to Cleveland, Ohio?"

I was only going as far as Cleveland . . . So imagine just for one second the questions that Ilan Ramon's mother must have.

Seriously, space travel poses many philosophical and religious questions. According to many, the Jewish perspective defines one day as being between sunrise and sunset.

In space that's only 90 minutes.

That leaves every Jew in space to ask the obvious question: Every 24 hours or every 90 minutes -- how often do I call my mother?

Ilan, you will have to figure that one out for yourself.

I am sure that as soon as Ilan's mother sees him floating in zero-gravity, she'll wonder if he's eating enough.

But if it will put her mind at ease, you can tell your mom not to worry. You'll be fine. You can even tell her I've tasted the freeze-dried kugel, it's decent, but the freeze-dried falafel is out of this world.

II. THE PARTNERSHIP

Kidding aside, we at NASA are thrilled about our partnership with Israel; we are excited that Ilan Ramon and Itzhak Mayo are training in Houston. This is a relationship that we've worked on for some time.

When I speak about the U.S.-Israeli relationship in space . . . the benefit is to our relationship here on Earth.

When the Israeli astronaut flies, he will help launch a camera that is part of what we are calling the Mediterranean Israeli Dust Experiment. It's just one of many experiments we're working on together that use the unique vantage point of space to look back at and monitor the Earth and its resources. This experiment will help us understand how suspended particles in the atmosphere called "aerosols" contribute to the formation and distribution of rainfall globally.

Just this last week, in a joint U.S.-Israeli project, Israeli scientist Daniel Rosenfeld discovered that aerosols resulting from forest fires can actually suppress rainfall.

You don't have to be a rocket scientist to understand that water is crucial to the Middle East. We at NASA like to think that discoveries like this are a down payment for the myriad of things to come.

In the next five to seven years NASA plans to launch more than 30 space missions -– a comprehensive examination of almost every aspect of our home planet.

Quite literally, Israel will be "plugged" into this global monitoring and observing system.

It is important that we are working with several Israeli universities, because we need to keep inspiring young people. That way we make sure that although Ilan Ramon is one of the first . . . he's not one of the last.

III. THE VISION

Tonight, I ask you to think about that opportunity. And I will leave you with some of the accomplishments that I hope and believe will be the product of the NASA-Israeli partnership in the next millennium. I will leave you to imagine some of the exhibits that you might see if you come back to this museum in 5 or 10 or 25 years.

Think about this:

If Earth-size planets around other stars exist . . . it is our goal to see them. If those planets have life-forms, we hope to detect them. And even understand them.

We're going to attempt to build telescopes that are so unbelievable; they will have the capacity to see oceans, continents, clouds and mountain ranges on the planets orbiting these nearby stars.

It is our hope at NASA that in the next generation kids from Israel and from around the world will have a picture of this distant planet on their bedroom walls.

Think about the implications such a spacecraft will have on navigation, guidance and communication systems here on Earth. Right now GPS only has an accuracy of ten meters. To build the telescopes we're talking about we will need a navigation accuracy of ten-billionths of a meter!

We also hope to develop climactic models that will not just predict weather two or three days out. Not even a week or a month. It is our goal to have yearly predictions of climate. Think about the implications for farming.

In the new millennium we hope to send robots to planets in our solar system and to interplanetary space. The robots that we will send in the future will be walking, self-autonomous, self-sensing devices. They will have their own artificial genetic code and they will be able to heal themselves when damaged. They'll even operate in groups, selecting leaders along the way, and experience emotions, like fear and excitement.

Using these robots, we will complete a census of our own solar system, bringing back samples from every key planetary body.

We will have colonies of robots that will help set up the living systems before astronauts arrive at places like Mars and Jupiter's moon, Europa. This will free astronauts from mundane tasks.

We will have communications networks, an interplanetary Internet around these planets. We will have a virtual presence on each and every one of the key planets and the moons and asteroids and comets in our solar system.

IV. CONCLUSION:

And one day, children will come to this museum. They'll still learn about when the first airplane took off and how the Eagle landed.

But they will also learn about planes that fly from Washington, DC to Tel Aviv in 2 hours, not half a day.

And it is my dream that the children who come here might also see a boot -- the very first boot -- that crunched down on the Red Planet. They'll see the spacesuit the astronaut wore . . . or maybe even the spacecraft that was used to land on Mars.

I know it can happen. I know it will happen . . . And sooner than most people think.

When it does, there is no doubt, that the young people who look at that boot and that spacecraft in total awe, will want to grow up and take the next step in exploration.

And just as important, they will be reminded that what made it all possible was Americans and Israelis -- along with astronauts, scientists and engineers from peace-loving nations everywhere -- working together.

And that's enough to make any mother proud.

###